

IN THE CLAIMS

Claims 1-2, 6-8, 12-13 and 17-22 stand for consideration in this application. Please cancel claims 3-5 and 9-11 without prejudice or disclaimer, amend claims 1, 7 and 17, and add new claims 18-22, as follows:

1. (Currently Amended) An antenna comprising:

a ground conductor having a ground potential;

a single feeding point whose one end is formed by a part of the ground conductor; and

a plurality of transmission lines to which RF power supplied to the feeding point is input, for radiating electromagnetic waves of a plurality of frequencies into space,

wherein the plurality of transmission lines include a transmission line for radiating electromagnetic waves of [[a]] the plurality of frequencies commonly into space, and

wherein impedance matching is performed at the feeding point with respect to the plurality of frequencies, and

wherein when the plurality of frequencies are composed of n frequencies of first, second, third and fourth to n-th frequencies, where n is a positive integer of two or more, the total length of the plurality of transmission lines is shorter than the sum of a quarter wavelength of an electromagnetic wave of the first frequency and half wavelengths of electromagnetic waves of the second, third and fourth to n-th frequencies, the second, third and fourth to n-th frequencies being higher than the first frequency.

2. (Original) The antenna according to claim 1,

wherein the ground conductor, the feeding point and the plurality of transmission lines are formed of an integrated metal plate.

- 3-5. (Canceled).

6. (Original) The antenna according to claim 1,

wherein the ground conductor is located on one side of one of the plurality of transmission lines.

7. (Currently Amended) An antenna comprising:
- a ground conductor having a ground potential;
 - a single feeding point whose one end is formed by a part of the ground conductor; and
 - a plurality of transmission lines to which RF power supplied to the feeding point is input, for radiating electromagnetic waves of a plurality of frequencies into space,
- wherein the plurality of transmission lines include a transmission line for radiating electromagnetic waves of [[a]] the plurality of frequencies commonly into space,
- wherein, when the plurality of frequencies are composed of two frequencies of first and second frequencies, the plurality of transmission lines include a first transmission line whose one end is connected to the feeding point and whose other end is connected to a first branching point, and a second transmission line connected to the first branching point,
- ~~wherein, when the plurality of frequencies are composed of more than three frequencies, the plurality of transmission lines include a third transmission line whose one end is connected to the feeding point and whose other end is connected to a second branching point, a fourth transmission line connected between the second branching point and a third branching point, and a fifth transmission line connected to the third branching point, and~~
- wherein respective lengths of the plurality of transmission lines are set so that impedance matching is performed at the feeding point with respect to the plurality of frequencies, and
- wherein the total length of the plurality of transmission lines is shorter than the sum of a quarter wavelength of an electromagnetic wave of the first frequency and a half wavelength of an electromagnetic wave of the second frequency, the second frequency being higher than the first frequency.
8. (Original) The antenna according to claim 7, wherein the ground conductor, the feeding point and the plurality of transmission lines are formed of an integrated metal plate.

- 9-11. (Canceled).
12. (Original) The antenna according to claim 7, wherein the ground conductor is located on one side or one of the plurality of transmission lines.
13. (Original) The antenna according to claim 7, further comprising a transmission line for impedance adjustment connected to at least one of the feeding point and the branching point.
- 14.-16. (Canceled).
17. (Currently Amended) A portable wireless terminal comprising an antenna incorporated therein, the antenna comprising:
- a ground conductor having a ground potential;
 - a single feeding point whose one end is formed by a part of the ground conductor and
 - a plurality of transmission lines to which RF power supplied to the feeding point is input, for radiating electromagnetic waves of a plurality of frequencies into space,
- wherein the plurality of transmission lines include a transmission line for radiating electromagnetic waves of [[a]] the plurality of frequencies commonly into space,
- wherein, when the plurality of frequencies are composed of two frequencies of first and second frequencies, the plurality of transmission lines include a first transmission line whose one end is connected to the feeding point and whose other end is connected to a first branching point, and a second transmission line connected to the first branching point,
- ~~wherein, when the plurality of frequencies are composed of more than three frequencies, the plurality of transmission lines include a third transmission line whose one end is connected to the feeding point and whose other end is connected to a second branching point, a fourth transmission line connected between the second branching point and a third branching point, and a fifth transmission line connected to the third branching point, and~~
- wherein respective lengths of the plurality of transmission lines are set so that

impedance matching is performed at the feeding point with respect to the plurality of frequencies, and

wherein the total length of the plurality of transmission lines is shorter than the sum of a quarter wavelength of an electromagnetic wave of the first frequency and a half wavelength of an electromagnetic wave of the second frequency, the second frequency being higher than the first frequency.

18. (New) An antenna comprising:

a ground conductor having a ground potential;

a single feeding point whose one end is formed by a part of the ground conductor; and

a plurality of transmission lines to which RF power supplied to the feeding point is input, for radiating electromagnetic waves of a plurality of frequencies into space,

wherein the plurality of transmission lines include a transmission line for radiating electromagnetic waves of the plurality of frequencies commonly into space,

wherein, when the plurality of frequencies are composed of n frequencies of first, second, third and fourth to n-th frequencies, where n is a positive integer of three or more, the plurality of transmission lines include a third transmission line whose one end is connected to the feeding point and whose other end is connected to a second branching point, a fourth transmission line connected between the second branching point and a third branching point, and a fifth transmission line connected to the third branching point,

wherein respective lengths of the plurality of transmission lines are set so that impedance matching is performed at the feeding point with respect to the plurality of frequencies, and

wherein the total length of the plurality of transmission lines is shorter than the sum of a quarter wavelength of an electromagnetic wave of the first frequency and each of half wavelengths of electromagnetic waves of the second, third and fourth to n-th frequencies, the second, third and fourth to n-th frequencies being higher than the first frequency.

19. (New) The antenna according to claim 18, wherein the ground conductor, the feeding point and the plurality of transmission lines are formed of an integrated metal plate.

20. (New) The antenna according to claim 18, wherein the ground conductor is located on one side of one of the plurality of transmission lines.
21. (New) The antenna according to claim 18, further comprising a transmission line for impedance adjustment connected to at least one of the feeding point and the branching point.
22. (New) A portable wireless terminal comprising an antenna incorporated therein, the antenna comprising:
 - a ground conductor having a ground potential;
 - a single feeding point whose one end is formed by a part of the ground conductor; and
 - a plurality of transmission lines to which RF power supplied to the feeding point is input, for radiating electromagnetic waves of a plurality of frequencies into space,
 - wherein the plurality of transmission lines include a transmission line for radiating electromagnetic waves of the plurality of frequencies commonly into space,
 - wherein, when the plurality of frequencies are composed of n frequencies of first, second, third and fourth to n-th frequencies, where n is a positive integer of three or more, the plurality of transmission lines include a third transmission line whose one end is connected to the feeding point and whose other end is connected to a second branching point, a fourth transmission line connected between the second branching point and a third branching point, and a fifth transmission line connected to the third branching point,
 - wherein respective lengths of the plurality of transmission lines are set so that impedance matching is performed at the feeding point with respect to the plurality of frequencies, and
 - wherein the total length of the plurality of transmission lines is shorter than the sum of a quarter wavelength of an electromagnetic wave of the first frequency and half wavelengths of electromagnetic waves of the second, third and fourth to n-th frequencies, the second, third and fourth to n-th frequencies being higher than the first frequency.